X041947

# AUG 1 6 2004

# Section 3: 510K Summary

Submitting Company Name:

Innovative Imaging, Inc.

9940 Business Park Drive\*

Suite 155

Sacramento, CA 95827

\*Manufacturing and packaging also.

Contact:

Cynthia Kendall, President & CEO

Tel (800) 765-7226 Fax (916) 363-3815

**Application Date:** 

July 1<sup>st</sup>, 2004

Name of Predicate Device:

I<sup>3</sup> SYSTEM-ABD<sup>™</sup> Diagnostic Ultrasound

Model of Predicate Device:

Version 1 (V1)

Name of Mordified Device:

I<sup>3</sup> SYSTEM-ABD<sup>TM</sup> Diagnostic Ultrasound

(For which thus Special 510(k) is being

submitted)

Model of Madified Device:

Version 2 (V2)

(For which thus Special 510(k) is being

submitted)

Establishment Registration No.:

2950189

Classification of Device:

Class II

Ultrasound, Diagnostic

Original 510(k) Submission No.:

K902007

Reason for 510(k):

System software is being ported/rewritten utilizing a new Windows operating system. Existing I<sup>3</sup>SYSTEM-ABD<sup>TM</sup> Diagnostic Ultrasound system hardware will remain the same.

#### Indications for Use:

- Cataracts
- Retinal Detachments (a separation of the retina from the middle coat of the eyeball)
- Orbital Lesions
- Tumors
- Foreign bodies
- Inflammation
- Vascular Irregularities

#### Intended Use:

The  $I^3$ SYSTEM-ABD<sup>TM</sup> is a diagnostic ophthalmic ultrasound instrument designed to be used by ophthalmologists for diagnosis of the eye. It is expected that the user is trained in operation of the instrument, and on the medical interpretation of ultrasonic images. The intended use is the same for the entire  $I^3$ SYSTEM-ABD<sup>TM</sup> product family.

#### **Description and Comparison of Device:**

The difference between the Version 2 system and the existing I<sup>3</sup> SYSTEM-ABD<sup>TM</sup> Diagnostic Ultrasound system is the operating system on which it runs. The new version has a 32-bit operating system, the current version has a DOS based operating system. No changes have been made to any external accessories or probes.

#### Verification and Validation:

All verification and validation tests have been performed as specified in the Design Controls Procedures (QAP 4.4) in conformance with 21 CFR 820.30. The tests have demonstrated that the unit complies with the intended functional requirements and system specifications.

#### Sterilization Information:

The I<sup>3</sup> SYSTEM-ABD Diagnostic Ultrasound unit is not a sterile device.

#### Proposed Labeling and Marketing:

There will be no changes to either the labeling or marketing of the I<sup>3</sup> SYSTEM-ABD Diagnostic Ultrasound.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

# AUG 1 6 2004

Ms. Cynthia Kendall President & CEO Innovative Imaging, Inc. 9940 Business Park Drive Suite 155 SACRAMENTO CA 95827

Re: K041947

Trade Name: 13 SYSTEM-ABD™ Diagnostic Ultrasound

Regulation Number: 21 CFR 892.1560

Regulation Name: Ultrasonic pulsed echo imaging system

Regulation Number: 21 CFR 892.1570

Regulation Name: Diagnostic ultrasonic transducer

Regulatory Class: II

Product Code: 90 IYO and ITX

Dated: July 1, 2004 Received: July 20, 2004

#### Dear Ms. Kendall:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the I<sup>3</sup> SYSTEM-ABD<sup>TM</sup> Diagnostic Ultrasound, as described in your premarket notification:

#### Transducer Model Number

10 MHz Biometry A-Probe 8 MHz Diagnostic A-Probe 10MHz Diagnostic B-Scan 20MHz Diagnostic B-Scan If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This determination of substantial equivalence is granted on the condition that prior to shipping the first device, you submit a postclearance special report. This report should contain complete information, including acoustic output measurements based on production line devices, requested in Appendix G, (enclosed) of the Center's September 30, 1997 "Information for Manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound Systems and Transducers." If the special report is incomplete or contains unacceptable values (e.g., acoustic output greater than approved levels), then the 510(k) clearance may not apply to the production units which as a result may be considered adulterated or misbranded.

The special report should reference the manufacturer's 510(k) number. It should be clearly and prominently marked "ADD-TO-FILE" and should be submitted in duplicate to:

Food and Drug Administration Center for Devices and Radiological Health Document Mail Center (HFZ-401) 9200 Corporate Boulevard Rockville, Maryland 20850

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801, please contact the Office of Compliance at (301) 594-4591. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597 or at its Internet address "http://www.fda.gov/cdrh/dsmamain.html".

If you have any questions regarding the content of this letter, please contact Rodrigo C. Perez at (301) 594-1212.

Sincerely yours,

Nancy C. Brogdon

Director, Division of Reproductive, Abdominal and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosures

# I 3 SYSTEM-ABD Diagnostic System

Appendix F

#### Diagnostic Ultrasound Indications for Use Form

### Fill out one form for each ultrasound system and each transducer.

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

· · · · · · · · · · · · · · · · · · ·	Mode of Operation										
Clinical Application	Α	В	M	PWD	CWD	Color Doppler	Ampirtude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)	
Ophthalmic		V									
Fetal	<u> </u>			ļ							
Abdominal	<u> </u>										
Intraoperative (specify)	ļ			ļ							
Intraoperative Neurological	ļ				<u> </u>						
Pediatric	ļ <u> </u>										
Small Organ (specify)	1			<u> </u>							
Neonatal Cephalic	ļ			ļ				-	ļ <u>.</u>		
Adult Cephalic		ļ									
Cardiac	ļ	<u> </u>		ļ	ļ						
Transesophageal											
Transrectal		_		ļ				-			
Transvaginal				ļ . <u></u> .							
Transurethral	ļ	ļ									
Intravascular	<b></b>	ļ						-			
Peripheral Vascular	ļ	ļ									
Laparoscopic	ļ				ļ <u>.</u>						
Muscuic-skeletal Conventional						:					
Musculo-skeletal Superficial	ļ			<u> </u>	ļ				<b></b>		
Other (specify)											
N= new indication; P= Additional Comments:_	previo	usly (	cleare	ed by f	DA; E	e= added	under App	endix E			
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Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)
Division of Reproductive, Abdominal, and Radiological Devices

and Radiological Devices 510(k) Number

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Appendix F

#### Diagnostic Ultrasound Indications for Use Form

Fill out one form for each ultrasound system and each transducer.

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	A	В	м	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)
Ophthalmic	V									
Fetal										
Abdominal				<b>.</b>						
Intraoperative (specify)								· · · · · · · · · · · · · · · · · · ·		
Intraoperative Neurological										
Pediatric										
Small Organ (specify)				ļ						
Neonatal Cephalic				ļ. <u></u>						
Adult Cephalic	ļ			ļ						
Cardiac								<u> </u>		
Transesophageal										
Transrectal										
Transvaginal				ļ						
Transurethral										
Intravascular										
Peripheral Vascular							, , ,	·		
Laparoscopic								<del></del>		
Musculo-skeletal Conventional										
Musculo-skeletal Superficial								· · · · · · · · · · · · · · · · · · ·		
Other (specify)										
N= new indication; P= Additional Comments:			cleare	ed by F	DA; E	= added	under Appe	endix E		
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Prescription Use (Per 21 CFR 801.109)

(Division Sign Off)

Division of Reproductive, Abdominal,

and Radiological Devices

510(k) Number \_

KD41941

Appendix F

### Diagnostic Ultrasound Indications for Use Form

Fill out one form for each ultrasound system and each transducer.

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

	Mode of Operation											
Official Application	Α	₿	м	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify		
Ophthalmic	1			ļ						 		
Fetal			<u> </u>		ļ					ļ		
Abdominal												
ntraoperative (specify)						<u></u>						
ntraoperative Neurological				<u> </u>	<u> </u>				<b>\</b> .			
Pediatric					<u> </u>							
Small Organ (specify)				ļ								
Neonatal Cephalic				<u> </u>	ļ		ļ					
Adult Cephalic				<u> </u>	<u> </u>							
Cardiac										ļ		
Transesophageal												
Transrectal			<u></u>		<u> </u>							
Transvaginal	<u> </u>							<u> </u>				
Transurethral					<u> </u>							
Intravascular	]				<u> </u>							
Peripheral Vascular				]				ļ				
Laparoscopic			<u> </u>									
Musculo-skeletal Conventional												
Musculo-skeletal Superficial		<u> </u>										
Other (specify) N= new indication; P=			l	_				L				

Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Reproductive, Abdominal, and Radiological Devices

5 % Number ...

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# Diagnostic Ultrasound Indications for Use Form

Fill out one form for each ultrasound system and each transducer.

intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

	Mode of Operation											
Clinical Application	A	В	M	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify		
Ophthalmic		V		<u> </u>					-			
Fetal				ļ	<u> </u>		<u>,</u>					
Abdominal		<u> </u>		ļ	ļ							
Intraoperative (specify)	<u> </u>	ļ		<u> </u>								
Intraoperative Neurological		<u> </u>		<del> </del>						-		
Pediatric	<u> </u>				ļ			<u> </u>				
Small Organ (specify)	ļ	<u> </u>		ļ	<u> </u>							
Neonatal Cephalic		<u> </u>		↓	ļ		ļ	<u> </u>				
Adult Cephalic		<u> </u>		<u> </u>								
Cardiac	<u> </u>	<u> </u>		<u> </u>				ļ <u> </u>	ļ			
Transesophageal	<u> </u>			<u> </u>						ļ		
Transrectal	<u> </u>		L	<u> </u>						<u> </u>		
Transvaginal	<u>L</u> _	<u> </u>			ļ			ļ				
Transurethral							ļ					
Intrevascular			ļ <u>.</u>	<u> </u>		ļ		<u> </u>				
Peripheral Vascular					<u> </u>	<u> </u>			<u> </u>	<b>_</b>		
Laparoscopic			<u> </u>		<u> </u>	ļ			<u> </u>	ļ		
Musculo-skeletai Conventional												
Musculo-skeletal Superficial		<u> </u>				ļ			<del> </del>	<b> </b> -		
Other (specify) N= new indication; P=						<u> </u>		<u></u>		<u> </u>		

Prescription Use (Per 21 CFR 801.109)

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# 20 MHz Diagnostic B-Scan

#### Diagnostic Ultrasound Indications for Use Form

Fill out one form for each ultrasound system and each transducer.

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

	Mode of Operation									
Clinical Application	Α	В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)
Ophthalmic		V								
Fetal		ļ	<u> </u>		ļ					
Abdominal					<u> </u>					
Intraoperative (specify)		ļ	<u> </u>							
Intraoperative Neurological				<u>                                     </u>	ļ					
Pediatric	<u> </u>									
Small Organ (specify)				ļ	ļ					
Neonatal Cephalic	ļ	<u> </u>	<u> </u>							
Adult Cephalic								: 		
Cardiac										
Transesophageal	ļ <u>.</u>			<u> </u>						
Transrectal				<u> </u>						
Transvaginal				ļ	<u> </u>					
Transurethral				ļ						
intravascular										
Peripheral Vascular	<u> </u>		ļ	<u> </u>						
Laparoscopic				<u> </u>		<u> </u>				
Musculo-skeletal Conventional										
Muscuio-skeletal Superficial		<u> </u>		<del> </del>						
Other (specify)							<u> </u>		<u> </u>	
N= new indication; P= Additional Comments:_		ously (	cleare	ed by F	-UA; I	== added	under App	endix E		
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